

IN THE ABSTRACT

Please cancel the original Abstract at page 49, lines 1-19, and add a new Abstract as follows:

ABSTRACT

A magnetoresistance effect element includes a magnetization fixed layer in which the direction of magnetization is substantially fixed to one direction, a magnetization free layer in which the direction of magnetization varies in response to an external magnetic field, and a non-magnetic intermediate layer formed between the magnetization fixed layer and the magnetization free layer. The magnetoresistance effect element has a resistance varying in response to a relative angle between the direction of magnetization in the magnetization fixed layer and the direction of magnetization in the magnetization free layer, the resistance being detected when a sense current is applied to the film planes of the magnetization fixed layer, the non-magnetic intermediate layer, and the magnetization free layer in a direction substantially perpendicular thereto. The film area of the non-magnetic intermediate layer is smaller than the film area of each of the magnetization fixed layer and the magnetization free layer, the magnetoresistance effect element has a single conductive part with a film area smaller than a film area of the magnetoresistance effect element, and the magnetoresistance effect element is configured such that the sense current flows only through the single conductive part.